VOL. 18, NO. 2 OCT.-DEC., 1968

Inventory

A QUARTERLY JOURNAL ON ALCOHOL AND ALCOHOLISM

PUBLISHED BY THE N. C. DEPARTMENT OF MENTAL HEALTH

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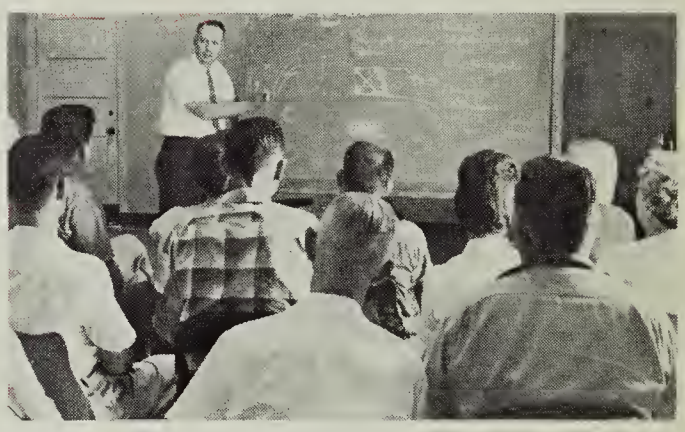
N. C. ALCOHOLIC REHABILITATION CENTER

BUTNER, N. C.



About the Center . . .

The A.R.C., as it has come to be known, is a 50 bed in-residence treatment facility for problem drinkers. Located at Butner, N. C., a small community approximately 12 miles north of Durham, N. C. off Highway 15, it is operated under the authority of the N. C. Department of Mental Health. The Center provides residence, treatment and workshop facilities for 38 male and 12 female patients.

A.R.C. Treatment Methods . . .

Treatment is by psychotherapy and consists of group discussions led by the professional staff, educational films, individual consultations with staff members, vocational guidance, recreation, rest, proper food and prescribed medications.

Length of Stay . . .

The basic treatment program is based on a 28-day schedule. The patient may remain for a longer period if, in the opinion of the staff, it will be of further therapeutic benefit to him. No applications for less than 28 days are accepted.

Admission Requirements . . .

1. Admission is entirely on a voluntary basis and a person cannot be accepted on court order or legal commitment. The Center cannot accept persons who have any court hearing or legal action pending which would interfere with or curtail their treatment program.

2. An appointment for admission is obtained by written or telephone application to the Admitting Officer, 406 Central Ave., Butner, N. C. (telephone 919 985-6770 or 985-4420). All appointments are confirmed by mail. They should be made through a physician or other professional person in the prospective patient's community.

3. Patients are expected to be sober on admission, and the Center will not admit a person if intoxication impairs his functioning. The Center does not have nursing or hospital facilities to treat acute intoxication.

4. A written report of a recent physical examination by a licensed physician must be presented upon admission. The patient's physical and mental condition must be good enough to enable him to participate in the treatment program, walk up and down stairs, etc. The Center does not have hospital beds or nursing staff for the treatment of serious physical or mental disorders.

5. A fee of $7.00 per day is charged for the four weeks of treatment. This may be paid by cash or check at the time of admission, or by an agreement signed by the patient at the time of admission — promising to pay the full sum at some time after discharge.

If a person is indigent he may obtain a letter stating this fact from his local county welfare agency, and upon presentation of this letter at the time of admission the request for payment will be deferred.

The Center does not refuse to admit any person because of lack of money, but feels that patients having treatment should take responsibility for the cost of the services if they are able to pay at the time of admission or later.

6. A social history, compiled by a trained social worker in the local welfare or family service agency or other professional organization is required. Arrangements for the history should be made early enough so that it reaches the Center within a week following admission.

Admitting Days . . .

Patients are admitted to the Center five days a week, Monday through Friday, between 9:00 a.m. and 12:00 noon and 1:00 p.m. and 5:00 p.m. by appointments as described above.

N. C. DEPARTMENT OF MENTAL HEALTH

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INVENTORY

OCTOBER-DECEMBER, 1968

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Why study drunken rats when there are so many problems with drunken humans?

The author explains that it is nearly always necessary to obtain answers to a variety of simpler questions first, especially when the initial question is very complex. "Moreover, existing techniques may prove inadequate, and digressions are required to develop new ones. If these smaller steps are not seen in relation to the original question, they may well appear to have little or no practical relevance to human problems."

BY ROBERT E. POPHAM

The Relevance of Basic Research

THE Addiction Research Foundation has financed a program of research on biological factors in alcohol addiction for the past eight years. The work in this area illustrates very well why certain projects come to be regarded as purely academic, and why the feeling develops that the research effort is being wasted. These attitudes are especially likely to arise when the initial question is very complex, as in the present case. It is nearly always necessary to obtain answers to a variety of simpler questions first. Moreover, existing techniques may prove inadequate, and digressions are required to develop new ones. If these smaller steps are not seen in relation to the original question, as often happens, they may well appear to have little or no practical relevance to human problems.

One of the early questions our researchers asked was relatively narrow and specific: It concerned the effects of alcohol on certain events associated with the excitability of living cells. For materials, bits of rat brain and kidney were used; experiments were conducted on an electric eel, and a particularly critical experiment was done on a piece of frog-skin.

These studies, taken out of context, have all the earmarks of exotica—of purely academic. To those faced daily with the task of helping the alcoholic patient, it must be difficult to see value in a study of frog-skin. In fact, because the same results were obtained for a variety of tissues from different species of animal, it was possible to conclude with some confidence that the effects observed are fundamental—applicable to all animal cells, including those of man. This in turn meant that one probable cellular basis could be postulated for three of the principal criteria of alcohol addiction: increased tolerance, the withdrawal syndrome, and loss of control.

Important though this may be, an even more exciting outcome was the demonstration that the cellular change involved was transitory: the chronic effect of alcohol was entirely reversible. It follows that the symptoms of human alcohol addiction also may be transitory—a view contrary to the traditional picture of the condition.

To begin to test these hypotheses, it was necessary to move from the realm of isolated cells to the behavior of whole animals. It would certainly have been impractical, if not unethical, to attempt the next step with human subjects. Therefore, a series of experiments was begun on the laboratory rat. But to study the effects of alcohol on the behavior of the

rat, it was necessary to have some means to measure intoxication in this animal. Existing methods did not discriminate blood alcohol levels in the range of interest with sufficient accuracy. Considerable time and money was spent on the problem, and eventually an ingenious device was invented for the purpose. Again, seen apart from the original question, it would be easy to condemn such work as a misdirection of research resources: why study drunken rats when there are so many problems with drunken humans?

The answer is that these experiments are of the utmost importance to our understanding of human alcohol addiction. To date, the work with the rat has confirmed in all respects the hypotheses that had been formed on the basis of the cellular studies. When doses of alcohol were administered to rats in amounts and over a period meaningful in terms of a human alcoholic bender, a marked increase in tolerance was rapidly acquired. Furthermore, when alcohol was withdrawn from "tolerant" rats, they showed a distinct hyperexcitability. This had also been seen in isolated tissues after a withdrawal of alcohol; it suggests the marked hypersensitivity that characterizes the abstinence syndrome in human alcoholics.

Again, however, the most exciting result was that no indication whatever was found of any residual tolerance after withdrawal of alcohol. The increased tolerance to alcohol was rapidly acquired, and as rapidly lost. Within two weeks of withdrawal, the rats exhibited no greater tolerance for alcohol than animals that had never received any.

What are the general implications of this work to date? I believe there are three:

To begin with, for the first time in the history of alcoholism research—at least with respect to etiological questions—we are acquiring some clarity about the potential role of the different disciplines involved. The symptoms of addiction that now are being explained on a biological basis arise only after a rather heavy consumption has taken place. Neither the Foundation studies nor biological work elsewhere has helped to explain the initial craving for alcohol. We may soon have explained why the alcoholic continues to drink when he is on a bender, but not why he started the bender in the first place. The problem of craving may well prove to be one for the behavioral scientist to solve.

Secondly, if the work described is eventually shown to hold true for humans, the effect on our traditional picture of the natural history of alcoholism will be considerable. Here is one thinking of the progression established by Jellinek in 1946 in his article, "Phases in the Drinking History of Alcoholism." For him and for most workers since, increased tolerance, loss of control and acute withdrawal states were more-or-less distinct events occurring at different times in the life history of the alcoholic. The Foundation work suggests rather that these phenomena are functions of the same underlying biochemical events, and are associated with particular drinking episodes rather than with the life history.

Finally, this line of experimentation holds out the distinct possibility of a rational chemo-therapy for alcoholics. That is, we might expect new drugs to be developed out of a knowledge of the biological basis of the symptoms that we wish to abolish, rather than being discovered largely by chance as in the case of Antabuse and Temposil.

The latter possibility alone renders the work relevant enough to satisify the most crtical. And if it should come about, it will be partly due to an experiment on a tiny piece of frog-skin.

This article is reprinted from *Addictions*, published by the Addiction Research Foundation of Ontario. Mr. Popham is head of the Research Division of the Foundation.

Utilize Information

If any community utilized the information in just this one edition of *Inventory* (Vol. 18, No. 1), we would be a long way along the path in solving our alcoholism problem. Thanks for the excellent work you are doing.

Dr. Stanley C. Kerby
Springfield, Vermont

Program Development

During the years I have found your quarterly journal a very important source of ideas and inspiration for program development and would like to have you transfer my subscription to my new address. I will be taking up new duties as administrator for the Northwest Council on Alcohol Problems.

L. J. Phillips
Crookston, Minnesota

Study Group

I am part of a study group of 24 meeting monthly on alcoholism. The group is composed of business and professional leaders. We hope to establish an alcohol information center for the Kingsport area. Would it be possible to have the group placed on your mailing list?

Carter P. Morell
Churchill, Tennessee

Helpful to Counselor

I would like my name to be placed on your mailing list to receive *Inventory*. I feel that this journal has some very informative information which would be helpful to me.

J. S. Willis, Counselor
Division of
Vocational Rehabilitation
Lexington, N. C.

Teaching Family Living

I find the *Inventory* journal very helpful for teaching the unit on alcoholism in my Family Living Class. Please place my name on your mailing list.

Mrs. Mary B. Miles
Thomasville, N. C.

Area of Social Concern

As a graduate student of social work, I feel that I need exposure to as many areas of social concern as possible. Many students feel as I do. They, and I, feel that social workers need to be aware of current developments and thought in these areas of concern.

Perhaps you might give some consideration to the idea of making *Inventory* available to students in the behavioral sciences. Certainly you would attract some to the field of alcoholism who might otherwise have gone unaware of the needs and challenges in this important area of concern.

Raymond Tribe
San Diego State College
San Diego, California

Personally Interesting

Recently I came across a 1965 issue of *Inventory*. Personally, I found the articles so informative and well presented that I would be interested in receiving it regularly. Thank you.

Anonymous
Winston-Salem, N. C.

VOL. 18, NO. 2 INVENTORY OCTOBER-DECEMBER, 1968

ARTICLES AND FEATURES OF INTEREST ON ALCOHOL AND ALCOHOLISM

There can no longer be the worlds of the non-alcoholic and alcoholic. We need one world together.

Our Mutual Sins

BY HARRY K. ELKINS, M.D.

I know some members of A.A. who go to a psychiatrist for consultation, but I am a psychiatrist who doesn't hesitate to go to Alcoholics Anonymous for consultation when I think I need it.

I asked one of my A.A. consultants in San Jose what I should talk about at this meeting. She said, "Why don't you talk about the idea that we should all work together." I said I wanted to talk about sin. She shook her head at the word, sin, and repeated, "You'd better talk about our all working together." I said, "Fine, then, I'll talk about the fact that it's a sin we all don't work together." That's my topic for today.

I've learned a number of things from my friends. They want candor, and they're all-or-none people. That's why I'm going to be candid and speak on why I think it's a sin we don't all work together.

Five years ago I attended my first northern California A.A. conference. I remember it well. I came with Max, and Max didn't say much on the trip up there. I suspect he wanted me to see and make conclusions for myself.

I was quite new to alcoholism at that time. I then believed that the alcoholic could change if you just listened to his unconscious long enough and could understand him properly. I felt that personal interest, understanding and psychiatric interpretations were sufficient. I didn't understand the alcoholic's "unstop-ability," the fact that he already understood his unconscious better than I could ever know it, the need for a crisis in his life, and the constant reminder necessary to keep his ego down to human size. I certainly didn't understand A.A.

At the convention I found myself very much alone. Everyone was warm and welcomed me, but I was a

This article was published by Chit-Chat Farms, a treatment center for alcoholics operated by The Chit Chat Foundation, a charitable foundation whose major interest is in alcoholism.

stranger who could not understand the language being spoken. Even the few doctors I met, and there were several of them—some good A.A. members—didn't seem to speak my language, or perhaps I didn't speak theirs.

To add hurt to my loneliness I heard A.A. speaker after speaker get upon the podium and rib the doctors who had tried to treat them. I remember one young lady who, with a flip of her cigarette, announced, "So I went to this doctor and he tried this, and I went to that doctor and he tried that, and then there was the psychiatrist who kept me five years on the couch. But I kept on drinking!" I was uncomfortable and a little angry.

Only on the way home did I see that this might have been a good experience for me. The A.A. speakers had played their role as devil's advocate and by so doing had jarred me into taking another look and a new point of view. Today I want to play devil's advocate to you.

My first topic is the fact that instead of one world, vitally concerned and working cooperatively about the problem of alcoholism, we seem to have two worlds: the world of the alcoholic and the world of the non-alcoholic. Not only do they often fail to understand each other, but sometimes they seem to oppose each other in what should be a common effort. An iron curtain, a high brick wall, sometimes seems to separate us, and I am not quite sure how it got there. There are errors on both sides of the wall, but today I am addressing Alcoholics Anonymous so let me express how I see this operating in some A.A. members.

I am speaking to those few, but particular, members of A.A. who sometimes give the impression of being so isolationist, so frightened

Most non-alcoholics are not so

about maintaining their sobriety, and still so angry with the rest of the world that I would call them the John Birchers of A.A. I know full well that these John Birchers also exist on the other side of the wall among non-alcoholics, but I have my special talk to them also. Both of the extremists believe there are two worlds and they are bound to enforce and continue this idea. To them there is only the world of the alcoholic and the world of the non-alcoholic, and those who are not one of them must be against them.

There are probably many reasons why some few abstinent alcoholics must keep the fires going to maintain two worlds which are separate and hostile to each other. Some have had experiences in the hands of non-alcoholic helpers which they feel were harmful to them. Others, in the course of their twelfth step work, are irked by the "mismanagement" of their babies by professional persons. I suspect that these few have abstinence but not true sobriety. I suspect many others cannot understand why anyone not an alcoholic himself could possibly be interested in the problems of alcoholism, want to help, and have something useful to offer. They perpetuate the myth that "you have to be an alcoholic to help an alcoholic."

The latter may be an excellent qualification, but it is not exclusive of many other types of help that the alcoholic frequently needs and which the non-alcoholic can offer—medical help, psychiatric help, job and vocational help, good guidance, and, often, faith and hope in oneself. The Salvation Army, many clergymen, quite

much "against" the alcoholic as puzzled and troubled by him.

a few physicians and many kinds of public agencies represent these types of help. To these few John Birchers I would say, "Come out of it."

What I am more certain of is that as you come forward to accept and understand and help educate the non-alcoholic world you will help erase the boundaries that divide our two worlds. A practical point in trying to bridge our gap is that you people particularly, working in hospitals and institutions, must be ready to extend yourselves to those non-alcoholics who are attempting to help in their own way, and in a way which may sometimes seem different, and even contrary, to A.A. tenets or your own personal ideas. Teach these people what you can and what you feel in your heart. Perhaps they will understand. But if you face them with rigidity and resentment, they will respond with the same. You may also learn something new in return. Our joint efforts are necessary.

The respect which A.A. holds in the non-alcoholic world need not be emphasized here. This respect is immense. You need not and should not feel sensitive or apologetic any more than you need to feel angry about the non-alcoholic's difficulty in understanding alcoholism. I suspect that most non-alcoholics are not so much "against" the alcoholic, but rather they are puzzled and troubled by him. I suggest that you help these non-alcoholics to get unpuzzled and untroubled.

There are those few who feel that A.A. is the one and only method of attaining abstinence and sobriety. It is similar to believing there is only one true church for alcoholics. This is not entirely true. There are, unfortunately, no statistics to tell us how many problem drinkers and alcoholics stop drinking and change their way of life without benefit of A.A. It does happen and I suspect that almost always some of the A.A. principles are at the base.

Certainly a crisis or bottom occurs to bring about a change. It may be through illness, threat of marital separation or a 502. It may be by way of a religious conversion or through medical or psychiatric help or merely, as you point out in A.A., after "becoming sick and tired of being sick and tired." In any event I suspect the basic factors you have experienced in A.A. exist outside of A.A. For some fortunate few, not only is abstinence brought about, but a true change in personality can occur without benefit of A.A. or psychiatry. Many different kinds of people become alcoholics and there are many different possible answers. Each person must find the answer which fits him, in his own way.

Lest these remarks be disastrously misconstrued by anyone here let me add that the "other ways" are not in competition with A.A., that A.A. is far ahead, and in my opinion, the most readily workable way that I know of. And I must certainly add that A.A. has never hurt anyone (although there are a few practicing alcoholics who would like to blame their drinking on A.A. that they "once tried") and that most important of all let no one now safely in A.A. slip into the fallacy that he can "go it alone" or that he now dare try some other ephemeral way of achiev-

(Continued on page 10)

A feature designed to help you keep posted on developments in the field of alcoholism.

WINSTON-SALEM, N. C.: The Alcoholism Programs of North Carolina met Dec. 5-6 at Hotel Robert E. Lee. The highlight of the two-day meeting was an address by the Honorable H. Patrick Taylor, Jr., Lieutenant Governor-Elect of North Carolina (second from left in photo, page 9), who spoke at a banquet Thursday night. With him are (left to right) Claude Hamrick, local attorney and member of the N. C. Board of Mental Health, who introduced Mr. Taylor; Bill

MORGANTON, N. C.: A "Workshop on Alcoholism in Industry" was sponsored by the Burke County Council on Alcoholism October 30. "Before attempting to put it on," Bill Warren, council director, said, "we solicited industry in this county and had great response and cooperation from 22 of the largest." They contributed financially to the overall cost and paid for the dinners of all their personnel attending. Over 200 members, supervisors, foremen, even presidents and vice presidents of some industries attended. The guest speakers were Dr. K. D. McMurrain, Jr., medical director of the Pepperell Co., West Point, Ga., and John J. Reagan, counselor on alcoholism for Raytheon Co., Lexington, Mass. Among those taking part in the workshop were (left to right below) L. S. Inscoe, Jr., who introduced Reagan; Dr. John C. Reece, who introduced Dr. McMurrain; Dr. McMurrain; Reagan; David Swift, president of the council; Warren; Dr. John Gambill, assistant superintendent and clinical director of the Alcoholic Unit at Broughton Hospital; and Dr. Olen Freeman, superintendent at Broughton.

Hales, president of the APNC; and R. V. Liles, also a member of the mental health board and chairman of its Alcoholism Committee. Mr. Taylor, in his address, recommended that a co-ordinating body that would be representative of all interests in the area of alcohol problems, including alcoholism, be established to promote and coordinate efforts among all agencies with responsibilities in the area of alcohol problems. He further proposed that the continuing proceeds from the "5 cents a bottle" levied on ABC store products in 1965 be used by the 1969 N. C. General Assemby to support this program, with one-half being used to aid the development of local program efforts in the whole area of alcohol problems —not just alcoholism. Thursday afternoon the APNC committees met to prepare for their Friday morning reports, while a session entitled "Informal Dialogue on Local Program Developments" met simultaneously. The committees reporting, were the Education, Survey, Study and Legislative Committees.

BURLINGTON, N. C.: A happy, safe and clean holiday is the threefold aim of a joint program by the Alamance County Council on Alcoholism and local law enforcement agencies here. Below, Bob Cooke, director of the council, and Sgt. Carl Gilchrist of the State Highway Patrol, hand "litter bags" and "literature" to Capt. Paul O'Neal of the traffic division of the Burlington Police Department. Both will be distributed to motorists by Burlington and Graham police and highway patrol officers during the holiday period in the routine discharge of their duties. The litter bag, hopefully, will help prevent littering, while the literature, a pamphlet entitled "Safety Demands Sober Drivers," will help prevent accidents. The holiday season, the officers and Mr. Cooke said, is one of the worst times of the year for accidents involving drinkers because of all the Christmas and New Year's parties. They urged motorists to "decide in advance of an occasion that you will not drive after taking a drink." Even small amounts of alcohol will "influence your driving judgment, reduce your driving performance and lower your driving efficiency," as the pamphlet points out. "But," they noted, "perhaps one of the most dangerous aspects of driving and drinking is that the motorist often feels more confident of his ability than when he is sober." The facts speak to the contrary.

ing sobriety without A.A.

There are seven deadly sins—excuse me, errors, if you prefer—which keep our two worlds, the alcoholic and the non-alcoholic, isolated and apart. The competent twelfth step worker and the competent non-alcoholic helper will not commit these errors:

The first deadly error is that of ignorance. Many persons who should be in a position to know the basic rudiments about alcoholism just don't know. They are ignorant—not ignorant persons but ignorant about the problem. A bartender may be more learned than the doctor or a judge. It is a sad fact that the diagnosis of alcoholism escapes many a physician, and even when he is confronted with all the signs and symptoms of alcoholism the unknowing physician, along with many others, may offer the statement, "You're no more an alcoholic than I am" or "Why don't you taper off with a little beer."

Ignorance is perhaps our first and gravest error. It allows some of us to offer medications, and sometimes in quantities that only abet or worsen the alcoholic's problem. Ignorance also exists on the part of many others. It confounds the alcoholic's spouse for a long while, often until she finds her way to Alanon. It confuses the early alcoholic who, sensing that something is wrong with him, wanders like a sick man during the Middle Ages spitting blood and not knowing what is wrong or what to do.

The second error is that of fear. Fear about alcoholism confounds all of us, those who should be in a position to help as well as the alcoholic himself. The physician often acts out of fear of offending both alcoholic and his spouse, as though alcoholism were a dirty word. The doctor hesitates to name it and talk about it, the employer fires the alcoholic for other reasons without attempting to talk openly about the problem and the wife hides it from herself, family and friends. All out of fear.

We are afraid to speak about alcoholism as though it were, as the dental and deodorant ads say, B. O. and Halitosis, "something your best friend won't tell you!" Fear immobilizes and controls both the alcoholic and his spouse. The alcoholic must come to face this alcoholism, since it need not be feared if it can be understood. The ability to speak without fear, to speak with understanding and direction, is most necessary in order to cut through the facade and fear of the man still drinking. You who work at twelfth stepping know this very well. Fear about alcoholism is the second error which we must become brave enough to overcome.

The third error is that of omnipotence. Omnipotence is practiced a great deal by all of us, both alcoholic and non-alcoholic. The superior attitude which says "I have all the answers and I am holier than thou" affects many a twelfth step worker as well as many a physician, spouse, court or well-meaning friend. It consists of such advice as "You must use willpower." "You must not be weak." "Snap out of it." "You've gotta have guts." The omnipotent twelfth stepper says, "Do it my way."

We also p r a c t i c e omnipotence when we believe that a magic medicine or rigid forms of psychotherapy alone will do the trick. When our omnipotence fails to bring about the desired results, we become angry and say the alcoholic won't cooperate. The omnipotent person ends up talking only to himself. As for omnipotence on the part of the alcoholic, I need not dwell on that. It deludes the alcoholic while he is drinking

and it sneaks up on him when he is abstinent. For this he needs the continued reminder and support of A.A.

The fourth error is that of resentment and anger. It is committed on both sides of the fence, usually after omnipotence falls flat on its face. The physician is apt to become disillusioned after this, then resentful and angry. This feeling may easily spread to his attitude about all alcoholics. Since he doesn't understand them and they have not responded to his omnipotent method he concludes that they are not worth helping or that they cannot be helped. His resentment may be openly expressed.

The spouse, the employer, and the law itself, having gone through all the steps of ignorance, fear and omnipotence, may take on an attitude of open anger and resentment. The bitter end point is reached when divorce occurs not only between the alcoholic and his spouse but between the alcoholic and his entire world. I need not mention the extent to which resentment and anger bog down the alcoholic's life. Along with omnipotence, it is perhaps the chief problem with which he has to contend.

The fifth error is that of dishonesty. The doctor commits this error whenever he sidesteps the issue of alcoholism and calls it something else. Hospitals practice it insofar as they may admit alcoholics under some diagnosis other than alcoholism. One of my medical friends who does treat alcoholics and treats them quite successfully regularly admits his alcoholics under the diagnosis of singultus, i.e., hiccough. It is the only way he can get them a bed in certain hospitals. The alcoholic who has not accomplished true sobriety practices this form of dishonesty also. So long as he cons himself into giving lip service only to the principles of A.A. he deludes only himself.

The sixth error I call idolatry. Idolatry may exist in those who are in a position to help the alcoholic as well as the alcoholic himself. It is nothing more than losing touch with a power greater than ourselves. By whatever name we may want to designate this power, either as God, nature, the forces of the universe, as love, or as a philosophy of life, no one can hope to help the alcoholic who does not feel the existence of this power, and no alcoholic is safe without it.

The worship of no pill, no machine, no special technique of intellectualized psychology will do us any good. By idolatry we take to worshipping something other than a higher power. We take to worshipping a special system of treatment or, in the case of the alcoholic, the bottle. In idolatry, both physician and alcoholic are left in a chasm of defeat.

The seventh and final error is that of indolence. It is committed by society as a whole. Our indolence exists insofar as we fail to do more than we are already doing about alcoholism. We are not doing enough to dispel ignorance. We are not doing enough to dispel fear. We are not doing enough to bend all resources already known to be effective. We are indolent in the proper handling of early alcoholics, whether it be at home, in the doctor's office, on the job, or in jail. Also in our hospitals and institutions, in teaching more about alcoholism in medical schools and to the public at large. In providing more and better facilities in hospitals, sobering up stations, outpatient clinics, and community sponsored halfway houses. In all this we commit the error of indolence.

There can no longer be the world of the non-alcoholic and the world of the alcoholic. We need one world together.

Reprinted from *Focus*, published by the Alcoholism Section, Washington State Department of Health.

The etiological factors that have been identified need to be assembled in a coherent form in order to clarify the processes and progression of alcoholism and permit an explanation of all alcoholic behavior.

Why DO SOME DRINKERS BECOME ALCOHOLICS, WHILE OTHERS DON'T?

BY RALPH G. CONNOR, PH.D.
EASTERN WASHINGTON STATE COLLEGE

WHAT is alcoholism? What are its causes? Why do some drinkers become alcoholics in three years or less, while some take twenty years, and others never become alcoholics?

One of the reasons that alcoholism is hard to define is that some definitions proceed from the level of the individual (drinking is "compulsive"), others from the standpoint of society (drinking interferes with one's work or with interpersonal relationships).

Increasingly, in recent years, the definition of alcoholism has come to be stated from a social orientation. It is not the compulsiveness of the drinking but its destructiveness that is important to society. An oft-quoted socially-oriented definition is, "Alcoholism is any use of alcoholic beverages that causes damage to the individual or society or both." Such a definition, however, is so vague and inclusive that it gives no indication of characteristics or attributes from which to develop research or treatment programs.

This difficulty in defining alcoholism has been largely solved by E. M. Jellinek,* Ph.D., a pioneer in the scientific study of alcoholism, who has recently proposed a classification of alcoholics and alcoholism. Four major types of alcoholism classified by Jellinek are important in America:

Alpha alcoholism represents a purely psychological, continual dependence or reliance upon the effects of alcohol to relieve bodily or emotional pain. The drinking is undisciplined but does not manifest loss of control or inability to abstain. Social and personal damage may be limited, there are no withdrawal symptoms, and no signs of a progressive process. This species may go thirty or forty years without progression and is sometimes called "problem drinking."

Beta alcoholism is that species of alcoholism in which such complications as painful nerve inflammation, inflammation of the stomach, and cirrhosis of the liver may occur without

*Deceased

either physical or psychological dependence upon alcohol and without withdrawal symptoms. The incentive to such drinking may be social custom, such as the heavy wine consumption in France.

Gamma alcoholism is that species of alcoholism in which there is an acquired increased tolerance to alcohol, withdrawal symptoms and craving or physical dependence, loss of control, and definite progression and behavior changes, such as described in Jellinek's earlier and widely-known *Phases in the Development of Alcoholism*. Obviously, the early stages of Gamma alcoholism may resemble, or actually represent Alpha or Beta alcoholism. Gamma alcoholism produces the greatest and most serious kinds of damage, the loss of control impairing interpersonal relations to the highest degree. This appears to be the predominant species in the United States and Canada, and is what Alcoholics Anonymous recognizes and describes as the "true alcoholic."

Delta alcoholism resembles Gamma alcoholism except that instead of loss of control there is inability to abstain. There is no ability to go on the wagon for even a day or two w i t h o u t withdrawal symptoms, although the ability to control the amount of intake on any given occasion remains intact. This is the predominant species in France, the so-called "inveterate drinker," where the individual may never be drunk, but is never completely sober.

Most theories on the causes of alcoholism are concerned with explaining Gamma and Delta alcoholism, although to be adequate any such theory should be able to explain the Alpha and Beta species. Any theory on the causes should answer these six questions:

1) Why is it that some people drink heavily for years and never become Gamma alcoholics and others become Gamma alcoholics after as little as two or three years of such drinking?

2) What is the explanation of the "progression" in the development of Gamma alcoholism, the increased tolerance, the loss of control, the appearance of withdrawal symptoms and physical craving?

3) What is the explanation of the "permanence of the loss of control"; that is, the inability of the alcoholic even after prolonged voluntary sobriety to drink again without losing control?

4) What is the explanation of the very large differences in rates of alcoholism between different ethnic groups, for example, the high rates for the Irish and the very low rates for the Jewish people?

5) What is the explanation of the fact that alcoholics have more alcoholic relatives than non-alcoholics?

6) Why is it that while many alcoholics are psychologically disturbed, others are not, and many psychologi-

cally disturbed people do not even drink, let alone become an alcoholic?

Many psychological theories on the etiology of alcoholism have been advanced by psychoanalytical writers, experimental psychologists, and psychologists using learning theory or personality studies. Although the formulations range from homosexuality to Oedipal complexes and from anxiety, frustration, conflict, and tension, generally, to learned responses, none of them answer all the questions previously listed.

In the past 20 years a number of physical causes have been proposed which are more rational in construction, even if still not completely satisfactory, than the psychological formulations. These include alcohol allergy, brain damage, nutritional deficiency, and glandular disturbance or malfunction.

Alcohol allergy is a useful term when used *figuratively* as by A.A. but it is not valid in the medical sense, because there is no detectable reaction, such as a rash or swelling, no development of antibodies, hence no skin test which would distinguish between normal and abnormal drinkers.

Brain damage does occur as a consequence of heavy drinking; but no specific brain pathology has been found in alcoholics. A recent hypothesis, however, assumes that brain damage acquired in the course of heavy initial alcohol intake, may, in time, produce those behaviors which distinguish alcoholism. This hypothesis is based on several reports of brain damage in alcoholics.

One investigator has suggested that the apparent cerebral atrophy, or wasting away of the brain tissue, is the result of the gradual destruction of large numbers of brain cells, and that this damage and the effects of nutritional deficiencies and head

None of the etiological

injuries can explain the permanent loss of control of drinking.

Since the higher cerebral areas and their functions are the first to be anesthetized and are the most affected by alcohol, with the progressive destruction of the cerebral cortex, less alcohol is needed to anesthetize to the point of loss of control. Once alcohol enters the alcoholic's system, there is an immediate paralysis of the control center of the brain. According to a certain investigator, this kind of permanent damage to the brain would explain the permanence of the loss of control.

Plausible as such a hypothesis seems, it is not only highly vulnerable but internally contradictory as well. First of all, much more marked brain changes frequently show no correlation with behavior changes. Secondly, as long as the recovered alcoholic does not drink he can function normally—and several hundred thousand recovered alcoholics functioning effectively and intelligently in all walks of life clearly attest to this fact.

One would also have to assume that alcohol selects a single tiny area of the brain whose only function is the control of alcohol intake and that, of all possible brain damage, this is the only damage that is irreversible. In fact, however, several investigators have shown that some of this damage is reversible. *Brain pathology, at this time, does not seem to provide an effective explanation of any type of alcoholism.*

The proponents of nutritional deficiency as a cause of alcoholism assume that in the prospective alcoholic a need or craving for alcohol exists from the beginning, or that

such a need can develop into a craving.

Another assumption is that voluntary increased intake of alcohol is evidence of such a need or craving. This assumption is based on experiments which showed that rats maintained with a diet deprived of some of the elements of the Vitamin B complex increased their alcohol intake when given freedom of choice between pure water and an alcohol solution, and that the level of alcohol intake dropped when the diet was supplemented by untreated yeast or liver. It was further shown that certain strains of rats were more likely to respond to such deprivation with an increased alcohol intake, suggesting a possible heredity factor.

From this starting point, the genetotrophic theory of alcoholism has been developed. According to this theory, the tremendously complex metabolic system which is inherited, just as are physical characteristics, varies from individual to individual. Occasionally, anomalies or abnormalities occur which cause a need or craving for alcohol. Then, when alcohol is ingested, it becomes incorporated into the metabolic system in such a way that this craving becomes overwhelming, leading to loss of control and the inability to abstain.

In support of the genetotrophic theory it must be pointed out that this represents the best effort to date to elaborate a *theory* of the etiology of alcoholism. Furthermore, while the relationship is not otherwise clear, there is too much evidence for the influence of heredity to be completely ignored, and finally, there is no doubt of the existence of individual metabolic patterns, although there are grave doubts that such patterns are as variable or as extensive as this theory suggests.

In criticism of this theory, it must be pointed out that some of its premises and deductions are open to grave doubt:

1) The existence of this "need" or craving for alcohol is assumed to be present in the pre-alcoholic state, yet no one has ever shown that such a pre-alcoholic need or craving for alcohol does exist.

2) The claim that there are certain common metabolic features among compulsive alcoholics which differentiate them from non-alcoholics is based on the finding of differences in 6 of 60 clinical variables upon which alcoholics and non-alcoholics were compared.

Analysis of these findings, however, shows that the differences found could be expected to occur better than 10 per cent of the time by chance alone. Scientifically, this cannot be construed to be significant of anything.

3) A universal point of agreement among critics of genetrotophic theories is that there is no rationale for a connection between metabolic abnormalities and a craving for alcohol in either the pre-alcoholic or the alcoholic phase.

4) It is argued that the non-alcoholism of the Jews is evidence of the working of hereditary metabolic patterns to the exclusion of cultural factors, yet the importance of culture has been demonstrated and is becoming clear, while there is no evidence at all for biological factors.

Furthermore, if the differences in alcoholism rates between the Irish

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Relationship Between Church, Alcoholic

BY THE REVEREND FRANK T. COOK

RELIGIOUS COORDINATOR

FLORIDA ALCOHOLIC REHABILITATION PROGRAM

It's easier to give "answers" than it is to become involved in understanding the problem.

MUCH is being written today about problems of identity.

People throughout our society are searching to find meaning in life; certainly the alcoholic is absorbed in this question.

The church is also engulfed in an effort to communicate a faith that to many seems empty of any substance. Often, as the alcoholic approaches the church for help, the church tries to provide an answer which it is not sure it understands—and conversely, the alcoholic listens only for the answer he or she wants. Neither is really looking toward involving themselves in each other.

A patient told me how he turned to his clergyman for help when he realized he had an alcohol-related problem. He said he poured out all his confusion and doubt to his minister. The minister listened as he unloaded his burdens. The patient at this point paused, looked at me, and asked, "Do you know what my minister did after I finished? He gave me too much answer!"

"Too much answer!" It's easier to give "answers" than it is to become involved in the understanding of the problem.

It's not my purpose to delineate the identity problems in the church. It is

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enough to recognize they exist: The Roman Catholic Church is beset in controversy over "the pill," and it is estimated that at least 700 priests have left the Catholic Church's ministry in the past year to marry and to accept secular jobs. In Protestant churches also, countless men are leaving churches for secular positions. A former parish minister recently was reflecting on his new job with Vocational Rehabilitation when he said, "Here in VR I am finding my most rewarding work." Enrollment in seminaries continues to drop off each year. One large Protestant seminary reported in the past two years the number of seniors willing to go into parish work has dropped from 53 per cent to 20 per cent.

The crises in the churches lie not in congregations and clergy who realize the concerns and are struggling to resolve them. The crises focus upon those who either deny or ignore the issues and mouth well-worn cliches.

Now we need to look at the person in an alcohol-related problem. Our research shows us that this person doesn't feel very significant. He often feels alone and misunderstood—that is rejected. Anger can boil within him but he refuses to recognize its existence. He feels that to express anger would be to hurt others and cause him further rejection. When his feelings begin to overwhelm him he literally "bottles them up." To ask an alcoholic who is just becoming aware of his problems, "Who are you?," leaves him baffled and confused. He begins to find strength where he thought he was weak, and he feels weakness where he was strong. Drinking numbs the pain of feeling and temporarily blots out his doubts, fears, and uncertainties.

Typically he felt "left out" as a teenager and often had to work hard to prove himself "worthy." Satisfaction was never felt, since whatever praise he garnered was usually short-lived so more and more had to be proved. His church often made him painfully aware of his shortcomings but did little to support his strengths.

He felt he could relate to his friends after he experimented with drinking. More courage, more of being a part of the gang—this was experienced.

But he heard the church saying to drink was bad. He perceived that he was being told that to feel more at one with his friends was bad. Confusion developed, and as drinking became more important, the place of the church in his life became less important. He could see the church's identity problems, could point them out scornfully, and could point out hypocrisy as his own isolation grew. Inconsistencies between various church groups regarding the use of alcoholic beverages seemed proof to him that the churches did not know of what they were speaking.

In our society the church, more than any other organization, represents and strives for perfection. The church also serves as the moral voice of our society, but a voice which seems to have very little impact today.

The alcoholic, seeking a positive identity but secretly feeling very insignificant, often overcompensates by striving for perfection—especially in vocational activities. And the more he works for perfection, the more obvious the church's imperfections become to him.

Since true perfection can never really be obtained, he drinks first because he wants to; then because he needs to; and finally because he has to. Many clergy and lay people fail to understand why someone literally "has to drink." And because they don't understand, they claim such a situation doesn't really exist.

In effect, both the church and the alcoholic try to uphold the perfection that isn't there. Each sees the other's imperfections without fully acknowledging their own.

As this conflict grows, the alcoholic may be drawn to the church in different

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and the Jews were to be accounted for genetically, then the great variations among various western European countries—the French and Italians, for instance, and even between geographic areas of the United States —would also have to be explained on genetic grounds.

5) Probably the most important doubt concerning this theory stems from a variation of the experiment in which rats were deprived of B vitamins and given free choice between water and 10 per cent alcohol solution.

In this experiment—instead of only the choice between water and alcohol —the rats were given a third choice of a sugar solution. When this was done the rats diminished their alcohol intake and showed a marked preference for the sugar solution. Furthermore, the rats which increased their voluntary intake of alcohol in the original experiments exhibited none of the phenomena associated with alcoholism.

There can be no doubt but that the nutritional theories which have evolved into the genetotrophic theory represent a significant advance in thinking about alcoholism if only because they have opened a wider tigation. However, it will take a great deal more research before anyone can assess the importance of these findings and suggestions for the total picture.

With minor differences, endocrinological theorists hold that there is a pituitary deficiency which eventually results in exhaustion of the adrenal glands. The principal proponent of this theory believes that there is a metabolic pattern which precedes and is responsible for compulsive alcoholism, the Gamma and Delta species.

It is true that some symptoms resemble some manifestations of endocrine dysfunctions; and, there is a biochemical and clinical similarity between delirium tremens and Addisonian crisis, which is exhaustion of the adrenal gland. There is ample evidence to show that large alcohol intake exerts an exorbitant stress on the adrenals; and there is a fairly high incidence of adrenal damage in alcoholics. Careful studies have shown that adrenal steroids and ACTH are effective, and sometimes dramatic in the treatment of the withdrawal or hangover stages of alcoholism.

However, the criticisms are uniformly severe and valid:

1) No pre-existing, genetically determined endocrine pattern has been established, nor has an initial craving for alcohol been demonstrated.

2) There is no plausible rationale for the loss of control as the result of such damage.

3) Despite the fact that there is a fairly high incidence of adrenal damage among alcoholics, still, over 60 per cent of alcoholics tested indicate no pituitary adrenal deficiencies and, in consequence, a pituitary adrenal defect cannot be characteristic of alcoholics generally.

4) The statement that delirium tremens represents a possible end stage of alcoholism in complete adrenal exhaustion is a misconception, since it frequently occurs long before gross deterioraton has set in and may be followed by long periods of alcoholism without reappearing.

5) Finally, and most destructive of all, a number of studies have clearly shown that adrenal steroids and ACTH are useless in the treatment of chronic alcoholism as distinct from acute intoxication.

Adrenal steroids and ACTH do not help the alcoholic abstain; and they do not correct the loss of control if and when the alcoholic relapses. The endocrine theories may have a role in the mechanism of withdrawal symptoms, but there is no evidence that they have any significant influence in the genesis or progression of alcoholism.

True addiction, in the pharmacological sense, refers to a distinct and characteristic set of processes which serve to identify addiction and addictive drugs.

The first is an acquired tolerance by the tissues which leads to a need for more of the drug; and second, adaptation of the cell metabolism to the drug which is evident in the drastic withdrawal symptoms, which, in their turn, lead to a "craving" or physical dependence.

Resembles Addiction

Both of these processes seem clearly apparent in Gamma alcoholism; and, because of the resemblance of alcoholism to addiction, the World Health Orginization formed special committees in 1953 and again in 1954 to consider alcohol in relation to the addiction producing drugs and the habit forming drugs.

"Because of the presence of increased tolerance, withdrawal symptoms, and "compulsive craving," the committees reported that alcohol was something more than merely a habit forming drug.

The committees' conclusions with respect to the relation between alcohol and the addiction producing drugs are even more interesting and important—as the following points indicate:

1) Continued use of morphine drugs produces tolerances 20 to 100 times above therapeutic doses, while the tolerance to alcohol increases only 3 to 4 times above initial tolerance.

2) The incidence of addiction in users of heroin is practically 100 percent; among users of morphine around 70 percent; but among users of alcohol it is only 10 percent at a maximum.

3) Addiction to drugs in the morphine group sets in after approximately 4 weeks of continued use, but addiction to alcohol requires a very high intake for a period of from 3 to 20 years.

4) Treatment of alcoholics achieves a much greater proportion of satisifactory and lasting results than treatment of opiate addicts.

5) Following prolonged and very heavy drinking, severe withdrawal symptoms in the form of convulsions or delirium or both may occur; and these symptoms are more dangerous to the life of the individual than are any of the manifestations of withdrawal of morphine, and persist almost as long.

6) Although only a small minority of the users of alcoholic beverages become addicted as compared to the users of heroin or morphine, this small minority is probably 20 times greater than the number of addicts to all other drugs, and thus the social damage of alcohol addiction is far greater than from the so-called addiction producing drugs.

Thus, the deliberations of these two World Health Organization committes bring out, unequivocally, that in some species of alcoholism the criteria of true drug addiction are fulfilled. The great differences in time and amounts as between alcohol and the narcotic drugs, necessary to produce addiction, obscure the identity and nature of the addictive processes. It has been suggested, however, that the time factor, in the case of ethyl alcohol may be due to its similarity to normal cell food substances.

It is quite clear that no one of the etiological formulations we have discussed is adequate to the explanation of all the phenomena of alcoholism. At the same time, it is equally obvious that each of these etiologies has been preoccupied with what is undeniably an aspect of alcoholism—though such aspect may be of greater or lesser importance.

The great problem in alcoholism, has been, and is, to assemble this jigsaw puzzle into a coherent form, clarify the processes and progression of alcoholism, and permit an explanation of alcoholic behavior all the way from simply heavy drinking to the most compulsive loss of control.

An important first step in this direction has been the development of Jellinek's classification of the species of alcoholism. Jellinek's classification provides a basis for sorting out those factors which have been identified by the various disciplines and assessing their importance in the various forms of alcoholic behavior and in the progression of alcoholism to its end stages.

Though the clarification has been impressive the problems of Gamma and Delta alcoholism are still far from solved. Fittingly enough, the final etiologic formulation we will discuss was advanced by Jellinek as a hypothesis for *further research* on Gamma and Delta alcoholism.

Though he does not imply that it is a complete explanation, essentially Jellinek's hypothesis is one of addiction, at least in its end state. He suggests that enzyme and vitamin anomalies, liver injuries, adrenal factors, and many biochemical lesions known at this time, may weaken the resistance of nerve tissue to the integration of alcohol into its metabolism and to become dependent upon it.

Such anomalies and injuries could be products of heredity, or they could be brought about through the stresses which prolonged heavy alcohol intake may exert upon them. In view of the fact that some persons become addicted in three years or even less, others become addicted only after twenty years, and some never do, it seems likely that heredity may be a factor.

Moreover, the absences of such anomalies could account for the phenomenon of Alpha alcoholism, in which very heavy alcohol intake together with marked drunkenness does not produce any progression, particularly no transition from psychological to physical dependence.

Such a formulation has the tremendous advantage that it invites into participation as possible operators all the other factors from endocrinology, nutrition, physiology, and biochemistry, as well as social and psychological factors.

This means that an Alpha, Beta, or Delta alcoholic who overdrinks because of psychological stress or social custom might become a Gamma alcoholic because of metabolic anomalies, liver injury, adrenal factors, or other biochemical abnormalities after enough stress from heavy drinking to break down any hereditary weakness in these areas.

Other drinkers by virtue of heredity, would succumb to Gamma alcoholism almost from the start, while still others would never progress beyond Alpha, Beta, or Delta, thus accounting for the operations of all the factors emphasized in other theories.

While it is perfectly obvious that the problems of alcoholism are far from solved, it is equally evident that the general outlines of the disease are much clearer today, the major avenues of research have been opened, and the guidelines to future research well marked.

It is not whether a person has brain damage or not that is the critical issue, but rather how his behavior is affected.

Alcohol Consumption and Brain Damage

BY CHARLES W. DILS

SOME of the questions often asked by those concerned about the effects of long-term excessive drinking are:

"How much or how long does a person have to drink before he runs the risk of developing brain damage?"

"If brain damage has occurred, what are the symptoms?"

"Suppose we suspect that an alcoholic has brain damage—what can be done for him?"

The answers to these questions would depend largely upon the circumstances of each individual case, but there is a growing body of facts and theories which can provide helpful information. Additional research and clinical findings are needed to give us a complete picture of this disorder, but let's survey some of the available knowledge regarding brain damage and alcohol consumption.

First it is necessary to outline the differences between the two basic types of brain disorders related to alcoholism. These are referred to clinically as *acute brain syndrome* (ABS) and *chronic brain syndrome* (CBS).

ABS pertains to temporary, reversible dysfunction of the brain cells, *from which the person ultimately has a complete recovery.* This includes both the symptoms and effects of sustained intoxication as well as the hangover, or after effects. This condition is widely known and recognized by laymen and specialists. Some of the well known effects of prolonged acute intoxication are mental confusion and disorientation, loss of coordination, impairment of judgment and emotional control, blackouts (later loss of memory for what happened when drunk, although the

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person was conscious at the time), hallucinations (seeing, hearing or feeling things that aren't there), unconsciousness, and, *if the level of alcohol in the blood stream reaches a high enough point, death.*

After a person has stopped drinking and his body has expelled or used up the alcohol that was present, he may experience withdrawal symptoms as his nervous system and body metabolism try to readjust to the absence of alcohol. These symptoms generally occur from one to four days after drinking has ceased and may consist of the "shakes," epileptic-like convulsions, D.T.'s (Delirium Tremens, a serious condition which sometimes results in death) or just a hangover, accompanied by headaches, nausea, weakness, restlessness, etc. If a person has been on a weekend binge, it may take only a day for him to mentally recover. On the other hand, if he has been drinking heavily and steadily for weeks or months, it may take equally as long for the nervous system and for the mind to become completely clear and to function normally.

During this "drying out" process an individual who has been drinking heavily may require medical attention, possibly hospitalization, in order to prevent serious effects.

After the acute or temporary symptoms have cleared, an alcohol user may still have symptoms of brain damage. This is due to permanent nerve cell damage in the brain, *and is referred to as chronic brain syndrome* (CBS). Since the human body is not capable of growing new nerve cells to any appreciable extent, the loss is largely irreparable. *If this damage is slight it may not be noticeable to the person himself,* his friends or family, but may be detected by a physician or psychologist through special examination techniques.

Sometimes personality changes are the first obvious symptoms of CBS, in which a person might become less considerate of others, irresponsible, more belligerent and argumentive, more withdrawn and socially inept, careless, brooding, etc. The kinds of personality changes that might occur depend in large measure on the previous personality traits. An individual with a relatively healthy personality would tend not to change as much or as noticeably as a person who was neurotic or who had preexisting character defects. Temporary personality changes take place when a person has been drinking for an extended period, but if they persist after several months of sobriety, there is a strong likelihood that they are the result of permanent brain damage.

Loss of Intelligence

Another important manifestation of brain damage in alcoholics is the *deterioration of intelligence.* In the early stages this can be most effectively determined by psychological tests. Certain areas of mental functioning seem to be more susceptible than others, for example eye-hand coordination, abstract problem solving ability, reaction time, accurate perception of complex visual figures, etc. As the deterioration becomes more pronounced, reasonability, judgment, ability to learn new material, vocabulary and other factors become obviously impaired.

Loss of intelligence and mental abilities are not easily detected in alcoholics because generally they have above average intelligence quotients (IQ's). A number of studies of patients at alcoholism clinics throughout the country show mean IQ's ranging from 104 to 120, with the overall mean near 110. This is contrasted by IQ's reported from alco-

holic groups in state hospitals, prisons, county jails and other detention facilities, where the mean IQ scores are usually from 85 to 95, well below the national average. This reflects not *only deterioration in intellect* but an accompanying inability to lead an adequate, responsible and socially adaptive life. Some of the differences in IQ's between outpatient and incarcerated alcoholics might be attributed to economic and educational factors (IQ's initially lower), but there is strong evidence that the effects of brain damage play a prominent part.

Alcoholics may be committed to mental hospitals because of serious mental or emotional disorders. As a rule they do not have a higher rate of such disorders than the general public but their drinking may tend to worsen the symptoms that exist or to make it much more difficult for them to achieve a satisfactory adjustment to the usual demands of life on the outside. In some states, alcoholics who are not necessarily legally incompetent or insane are treated (either voluntarily or by forceful detention) at state mental hospitals. This is usually *because special treatment facilities for alcoholics are not deemed necessary or the state is not willing to finance them.* Present treatment centers would have to be tripled, at least, to provide really adequate inpatient and outpatient treatment for alcoholism in most states.

The exact causes of brain cell pathology related to alcoholism are complex and not fully understood. A high alcohol level in the blood, although the source of intoxication or drunkenness, does not seem to cause direct permanent injury to the brain cells, except perhaps in extreme cases. *The damage is usually caused in more indirect ways,* such as thru vitamin deficiency, or by repeated lack of sufficient oxygen for brain cell metabolism during alcoholic coma. Some investigators think there is a relationship between a certain kind of brain damage and cirrhosis, which is commonly seen in alcoholics. Some neurologists believe there is an interaction between alcoholism and cerebral arterio-sclerosis (hardening of the small arteries of the brain), in which excessive drinking tends to accelerate premature senile deterioration of people in their 50's and 60's. Still another authority has pointed out that intoxicated persons frequently fall and have other accidents which are liable to result in head injuries and brain damage. He adds that there is a *greater possibility the cerebral vessels will rupture when the blood alcohol level is high,* which directly refutes the old axioms "You can't hurt a drunk," and "a brain pickled in alcohol is indestructible."

Some medical and behavioral science authorities contend that the gradual destruction of brain cells related to repeated drinking is the cause for the absence of control often seen in the later stages of alcoholism, in which the person, once he starts drinking, cannot restrain his intake and drinks until he passes out or becomes too ill to continue. Still others contend that it is genetically determined (through heredity) by an enzyme disorder, and because of this difference in body chemistry some people become easily addicted to alcohol. There is also evidence from some studies to indicate that persons who drink to uncontrolled excess early in life (late teens to early thirties) have a pre-existing brain condition, perhaps caused by pre-natal or early childhood disease or injury. Such people tend to do more poorly on certain psychological tests than persons whose uncontrolled drinking

begins during middle age.

It is also possible that when the onset of uncontrolled drinking occurs in the forties and fifties it is related to organic (brain) changes from long-term drinking or from early senile changes. Still another contention is that personality changes which accompany the "change of life" (both in men and women) are responsible for increased reliance on alcohol. There is no clear cut evidence to prove that uncontrolled drinking is always connected with organic changes. We know that personality factors play a definite part, and the best guess is that a combination of these forces is usually involved.

One of the more dramatic organic conditions related to alcoholism is Korsakoff's Syndrome, which is accompanied by loss of recent memory and a pronounced inability to absorb or retain new information. Often *a person with Korsakoff's will confabulate or invent untrue stories to try to compensate* for his poor memory. This condition has been attributed to a vitamin dificiency (Thiamine) which is caused by a long-term nutritional shortage. Some alcoholics are notoriously poor eaters, subsisting for extended periods on the calories furnished by the alcoholic beverages, and the ensuing vitamin, protein and mineral deficiencies may result in a number of nervous system disorders, as well as other systemic diseases.

The detection of brain damage associated with alcoholism presents a thorny diagnostic problem to medical and psychological clinicians. The more advanced or pronounced cases usually can be revealed thru neurological examinations and routine mental or psychological tests. The related behavior symptoms and personality changes probably would have been noticed by family and friends, if not by the patient himself. *But early or mild cases are not likely to be noticed* or picked up in routine exams. Special techniques such as the electroencephalogram (EEG or brainwave recording), pneumoencephalogram (X-rays of the brain after air has been pumped into it), and various eye tests are time consuming, require expensive equipment and procedures, and are not yet developed to the point of being highly accurate. The chief problem here is that the brain, because it is well protected within the skull and because it is such a highly biological mechanism, *cannot be directly examined without extreme difficulty and danger*. Even when so examined, for example by autopsy after death, its functioning is so intricate and so little understood that conclusive evidence of an organic condition which can be directly related to alcoholism is not often achieved.

An indirect way of estimating brain damage is by evaluating behavioral responses which are regulated by the brain. Psychological tests which measure such functions as reaction time, spatial perceptions, eye-hand coordination, drawing of complex designs and recent memory may be employed. The patients' scores are then compared with scores that have been made by large numbers of normal subjects, with allowances for age and educational background. Such evaluations take from thirty minutes to two hours and can be obtained at many alcoholism or mental health clinics, or through private referrals. However, a very small proportion of alcoholics are so examined because of time and expense.

Alcoholics with mild brain damage can be rehabilitated and can lead active, happy, productive lives *if they*

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COMMUNICATION IN ALCOHOLISM

BY R. E. PETTIFOR, PH.D.

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SINCE behavior is communicative, what is it that most alcoholics are trying to tell the attentive observer?

There are many vantage points from which to view the multiple complexities of this behavior disorder. Since a psychologist studies human behavior and tries to understand it or change it, he is generally most comfortable when working with a conceptual model. The model or structure makes it possible to observe and discuss various aspects in behavior.

The basic position taken here is that alcoholism is a loss in responsible behavior and that its cause is a defect in communication. Responsible behavior is that behavior which meets one's needs in a way that does not deprive others of their ability to fulfill their needs.

When a person is acting responsibly he has a feeling of selfworth and also a feedback from others that he is worthwhile to them. These various feelings of worth are not derived in isolation, they are found in realistic communication with others. There are to and fro components in communication each accompanied by its own cognitive and emotional feedbacks.

Since responsible behavior involves the welfare of others, we might consider that irresponsible behavior is a failure in ability to communicate or be involved realistically with others. The irresponsibility of alcoholics is generally a decrease in ability to communicate. In his alienation and withdrawal he tends to deny the reality of the world about him.

The irresponsibility of alcoholics is generally a decrease in ability to communicate.

Psychological studies have shown a parallel between the behavior of a neurotic and the alcoholic. Neurotic behavior generally is related to some need to distort reality for a personal reason. The more narrowly personalized an individual's behavior becomes, the less likely is effective communication and realistic involvement with others.

A typical communication system can be examined to discover why it might become ineffective. Sometimes a communication system breaks down because there is inadequate power of drive. This is akin to depression or low mood states in an individual who is unable to gather energy with which to cope.

The individual who has used alcohol previously and discovered a power jag, tends to use it again and again. However, when alcohol is used up in the communication system in this way it usually reactively increases depression with consequent increases in unrealistic drinking.

Another failure of a communication system may be caused by "jamming." This is a superimposing of static and noise so that true signals do not come through. Some individuals feel a need for drowning out the true signal because it might mean discomfort and demand responsible action. Consequently the system is jammed with irrelevant stimulation and activity. How better to do this than to be a daily excessive drinker with consequent deadening of the important reality messages.

A communication system is not dependable when there is a denial of the authenticity of the signal. The reality of a situation comes through loud and clear

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are able to stop drinking. Once alcohol intake has ceased and possible withdrawal symptoms have abated, further damage to the brain and nervous system is halted. But the process cannot be reversed, the damaged brain cells cannot be restored. What can happen is that in six months or a year, through relearning, healthy brain cells can take over some of the functions that were impaired by the loss of destroyed cells. *Unfortunately, the ability to control drinking, to be able to drink socially and in moderation or even to sustain a mild state of intoxication, seems to be one function which cannot be regained.* At present there is to our knowledge no special kind of psychiatric therapy that is used in treating mild brain damage. After physical health is restored the mild CBS patient is treated the same as other alcoholics, often unaware that the condition exists. Many are helped to regain a successful adaptation to life through Alcoholics Anonymous, alcoholism clinics, mental hospitals and other treatment facilities. Patients with more severe forms of brain damage often receive transquilizers or nervous system stimulants to help them achieve emotional stability and better adjustment to their environment. Whether the brain damaged alcoholic will require long-term institutionalization depends upon how much his adaptive abilities have been impaired. It is not whether a person has brain damage or not that is the critical issue, but rather how his behavior is affected.

Perhaps clinicians do many alcoholics a disservice by not making greater efforts to diagnose early brain damage and then spell out to the patient in frank terms the consequences of his condition. Unfortunately, many drinkers would ignore such information, just as they do the physicians' warnings about gastric ulcers, liver diseases and other ailments related to heavy drinking.

One difficulty is that there are no accurate or comprehensive statistics that tell us what proportion of the alcoholic population is brain damaged. The more exacting studies which have been conducted for this purpose have been done with relatively small groups (usually 25 to 100) of alcoholics, usually confined to a single clinic or hospital. The incidences of brain damage reported in such studies run from a high of 57 per cent to a low of 15 per cent. One study conducted at the Florida Alcoholic Rehabilitation Program involving 795 patients, over a period of years, provides an estimate of 36 percent with organic complications, but there is no differentiation between acute and chronic brain damage. Educated guesses on the part of the FARP clinical staff run from 10 per cent to 25 per cent for chronic organicity among alcoholics who volunteer for treatment.

The implications of these figures for the handling of alcoholism as a public health problem are considerable. If a sizeable proportion of the people who are arrested and jailed for drunkenness have permanent brain damage, then the police and the courts are being grossly unjust in treating them as criminals or lawbreakers and failing to provide the indicated treatment. There is a current trend toward treating cases of repeated public intoxication as victims of an illness, based on recent high court decisions, as well as growing enlightenment of public officials regarding the nature of alcoholism. It appears that alcoholics who are forced to receive treatment do not

respond as well as those who seek it voluntarily, but therapeutic programs are being developed that promise a fairly high rate of improvement in court referred cases.

What can be done then, to promote the prevention and arrest of brain damage resulting from alcoholism? *Encouraging the person with drinking problems to seek help and treatment as early as possible would seem to be the surest, most effective move.* This can and is being done through public education, bringing greater knowledge about the potentially harmful effects of alcohol to the people. Providing more adequate treatment facilities, making it easier for alcoholics to avail themselves to help is another step. In many communities there is a need for public officials to become informed regarding the absence or shortage of treatment facilities. Individual citizens as well as professional and civic leaders must accept the full responsibility for reaching out to the alcoholic and letting him know that there is hope and someone is concerned.

Greater public understanding of the medical and psychological aspects of alcoholism also helps to erase the stigmas that have built up from centuries of moralizing and critical admonishments by frustrated friends, families and associates of alcoholics. One of the major drawbacks preventing alcoholics from entering treatment today is their reluctance to admit that they drink excessively or that their drinking creates major problems for them. Enlightenment and understanding have proven to be most effective in helping the alcoholic to come to grips with reality. The more that people know about the disease aspects of alcoholism, including the complexities of brain damage, the sooner we will be able to mount a program to control it.

COMMUNICATION

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but the operator denies its reception because to accept it would mean facing facts. Because of personality difficulties the operator is unable to cope. Alcoholic sedation aids in denying reality.

There are other analogies to a communication system but to mention just one more, there is oftentimes too narrow a reception band in the receiver. The set is tuned to only one frequency, excluding all others. In the alcoholic, frustrations arising from this are clouded by the sedative effect of daily drinking or going on a binge. The personality disorder related to this narrow receptiveness is one of paranoia or obsessive personality.

A communications technician can pinpoint the cause of failure in his apparatus. A human communication defect is much more difficult to define because it involves both sender and receiver. Unless the receiver can understand the messages he is receiving and can give to the sender the necessary feedback of understanding, it follows that the sender will not be aware of how he is behaving.

In alcoholism this lack of awareness of irresponsible behavior is an important factor. Oftentimes the very stupidity of alcoholic behavior cuts off communication with those affected by it.

If the counsellor can assess the causes of breakdown in human communication, steps to more responsible behavior sometimes can be discovered. Assessment of personality structure, situational factors and interpersonal relationships are three approaches in assessing the effectiveness of communication in humans.

In summary, the breakdown in communication, its causes and its treatment, may be worth researching. Not only the **intra** and the **inter** aspects of alienation require definition but treatment approaches which facilitate responsible communication within and between them need to be an integral part of the research.

SOCIAL ACCEPTANCE OF THE RECOVERED ALCOHOLIC

BY GERALD GLOBETTI

The data shows that the recovered alcoholic often pays the penalty of avoidance and segregation from full and meaningful interaction with others despite the widespread acceptance of alcoholism as an illness.

ALTHOUGH there is a growing acceptance of alcoholism as an illness, current attitudes toward the individual suffering from this disorder fall considerably short of the enlightened statements promoted in popular publications. The traditional stereotype of the alcoholic as a perverted, weak-willed delinquent is still a significant component of public opinion. Moreover, the alcohol addict who has stopped drinking and is on his way to sobriety does not find things easy for him. Many people deal with the arrested alcoholic warily and prefer to keep their social distance from him especially if in the past he has disappointed or embarrassed them. Thus, it appears that the recovered alcoholic continues to carry a stigma which results in a variety of social discriminations and a reduction of his life chances.

Unfortunately, studies of the factors which account for these adverse attitudes are relatively rare. Accordingly, this paper reports on a survey designed to measure how close a relationship a sample of adults in two Mississippi communities was prepared to tolerate with a recovered alcoholic. This research is part of a larger investigation conducted by the Sociology Department of Mississippi State University on the factors which tend to facilitate or retard the implementation of an alcohol education program on the local level. The project, which is under the auspices of the National Institute of Mental Health, is designed to demonstrate that it is possible to saturate a community with objective information about alcohol and alcoholism, thereby, creating an awareness of community needs in these areas, as well as means to meet these needs.

One important long-range goal of this program is to assist in removing the stigma associated with alco-

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holism and to create a therapeutic milieu within the community conducive to the rehabilitation of its victims. Thus, as a preliminary phase in meeting this objective it became necessary to investigate the current imagery of the alcoholic and the attitudes engendered by his return into the community. These data should afford some information concerning the factors which make either difficult or possible the re-acceptance of the recovered alcoholic back into the social life of the community.

Prior research has indicated that alcoholism is best viewed as a chronic disorder with a marked tendency toward relapse. The arrested alcoholic faces many insidious hurdles and remains a vulnerable person who needs prolonged support in reestablishing and maintaining his community roles. Consequently, his success in averting a relapse is dependent in large measure on the meaningful personal associations available to him. Distress and a negative self image often occur when an individual's feeling of social belongingness is undermined. If the recovered alcoholic lacks a sense of integration into the significant social groups within his community, his potential for returning to his abusive use of alcohol may become progressively more manifest.

The type of data afforded by this report are especially important to action workers who wish to modify unfavorable attitudes toward the rehabilitation of alcoholics. In other words, the findings should indicate those subgroups in the community to whom educational devices need to be directed in order to develop a greater understanding of the alcoholic's condition.

The data showed that there was significant reluctance on the part of community members to interact with a recovered alcoholic especially if the association was close. For example, the respondents were asked to agree or disagree with five questions indicative of their degree of social acceptance of the arrested alcoholic. These items were the following: (1) I would be willing to sponsor a recovered alcoholic for membership in my favorite club; (2) If I were employed in a job, I would not hesitate to share my office with a recovered acloholic; (3) If I had to work out of town for several months I would be willing to room with a recovered alcoholic; (4) I would strongly discourage my child from marrying a recovered alcoholic; and (5) I can imagine myself falling in love with a recovered alcoholic.

Willingness to interact with the arrested alcoholic under these hypothetical situations varied with the nature of the association. Nearly one-fourth of the sample were unwilling to associate with the recovered alcoholic under any of the conditions stated. A similar proportion showed hesitancy in sharing an office with the arrested alcoholic on the job while 30 percent and 40 percent, respectively, were unwilling to sponsor him in their favorite club or room with him on a business trip. As the degree of interaction became closer, the willingness to associate with the recovered alcoholic became increasingly less. Fifty-five percent of the respondents replied that they would not allow their child to marry a recovered alcoholic while 63 percent could not see themselves falling in love with someone who had overcome this illness.

The data further showed that individuals who accepted a recovered alcoholic differed from persons who rejected him in several personal and social respects. Individuals who possessed an attitude of high acceptance (those who disagreed with item 4

and agreed with item 5) were predominantly white males below the age of 45 years and from a high educational and socio-economic level. In addition, they participated in community affairs and favored education and treatment programs concerning alcoholism. They were also informed about the illness and reflected modern thinking on its etiology and treatment.

The community residents with a non-accepting attitude (those who refused to interact with the recovered alcoholic under any of the conditions) were primarily females, nonwhite, above the age of 45 years, and from low educational and socio-economic backgrounds. They were inactive community participants who looked with disfavor on education and treatment programs related to alcoholism. They conceived of alcoholism as a self-inflicted disorder and viewed its victims with disgust.

Conclusions and Implications

Since this paper has involved identifying the characteristics of individuals and subgroups within the community which might conceivably respond differently to a recovered alcoholic, it may logically be concluded with a brief discussion of its implications for action workers in the fields of alcohol and mental health education.

First, this study has reaffirmed the evidence which suggests that those individuals suffering from emotional or mental disorders form a subcultural group with some of the characteristics of a disadvantaged minority. The data showed, for example, that despite the widespread acceptance of alcoholism as an illness, the recovered alcoholic is still viewed by some as possessing a blemished character, and that he pays a penalty for being "different." This penalty is often avoidance and segregation from full and meaningful interaction with others. Such a situation indicates that the rehabilitated alcoholic is likely to meet resistance from certain quarters in his attempts to reestablish himself in the community, and as a result, may be forced into social positions of a lower status.

Second, this paper has delineated at least one common characteristic of the individuals who exhibit hesitancy in their acceptance of the "cured" alcoholic, namely limited participation in the community. Seclusion or a low rate of participation has been identified as being characteristic of non-white community members, older people, the less educated, and those from lower income groups. These persons also tend to be highly ethnocentric about their own values and behavior and therefore, less tolerant of the practices and the misfortunes of others. The individuals in this study who were unwilling to tolerate any contact with a rehabilitated alcoholic possessed all of these features. Educational devices should be directed toward these groups in order to develop a milieu among them more conducive to the acceptance of the recovered alcoholic. This, however, poses a formidable situation for the action worker since research indicates that these are the same groups who are less receptive to alcohol education programs. Thus, those who might gain the most from instructional programs on alcohol and alcoholism are least equipped to participate in them and least inclined to seek them.

Along these same lines it is apparent that acceptance of the recovered alcoholic is a function of education and social class position. Changes in approaches to traditional ways of thinking about an illness are likely to find their strongest opposition

among the less educated and lower socio-economic groups. The non-acceptors were predominantly from these levels. Thus, the findings of this paper may be explained partially in terms of a pattern of lower class conservatism. This may also help to explain Negro and white differences in social acceptance, since the majority of Negro residents were located in the lower socio-economic and education group. Since these groups are hard to reach with adult education programs, the point is most valid that instruction about alcohol and alcoholism needs to be a part of the school curriculum. The schools provide the one setting where the great majority of the low status children can be reached and where understanding of how to cope with mental and emotional problems can be developed.

The results also show that favorable attitudes toward the alcoholic accompany greater knowledge and communication about the illness. This may be broadly interpreted to suggest that dissemination of general information about alcoholism will be conducive to more favorable attitudes toward the recovered alcoholic. However, one must be cautious in assuming causality from concomitance. It is not known, for example, whether knowledge or information leads to a more receptive attitude or if favorable attitudes make one more inclined to seek information and gain knowledge about alcoholism.

Finally, the validity of the assumption of this paper that attitudes are indicative of action may be questioned. In other words, it is not known whether the high acceptors will actually translate their feelings toward the alcoholic into appropriate acts. Studies show that disparity often exists between what people say and what they actually do.

CHURCH, ALCOHOLIC

(CONTINUED FROM PAGE 17)

ways before abandoning hope for reconciliation. He may go to the church ostensibly to "get help"; but what he may be doing is challenging the church to provide a magic cure without any real involvement on his part. Some clergymen may fall prey and "take over" for him, offer advice, and in essence give "too much answer."

Or the church and the alcoholic may encounter each other through the request of a family member. For example, the wife may request that her pastor ask the husband to stop drinking. The wise pastor will help this wife define her role and her problems within the family while making himself available to the husband.

With few exceptions, the church will have little effect on the alcoholic (and possibly on many others in the community) until it is able to see and relate to its own humanness and imperfections. And when it is able to do this it may then be able to understand the lonely plight of the alcoholic and reach out meaningfully.

In doing this, churches will not necessarily need to alter their personal views regarding the decisions they will make on use of alcoholic beverages. But they will have to alter their thought that everyone else must share their views to be "right." Please note that this holds equally true for both the "dry" and the "wet" churches. Neither extreme has the perfect or absolute truth.

As the church becomes willing to look at itself and to question its own identity, it will begin to find out that God is not bound to the ineptness of man. And as the alcoholic challenges his own identity he will find that the bottle has hidden his ability to be a person.

When the alcoholic and the church begin to relate this pilgrimage together they will find a new health in creative and maturing identities.

DIRECTORY OF OUTPATIENT FACILITIES BY COUNTY —for ALCOHOLICS and/or THEIR FAMILIES

Key to Facilities

+ Community Alcoholism Program
(supported jointly by the community and the N. C. Department of Mental Health)

*** Community Alcoholism Program**
(supported largely by funds from local boards of alcoholic beverage control)

‡ Joint Mental Health and Alcoholism Facility
(supported by the community and the N. C. Department of Mental Health)

† Mental Health Facility
(supported by the community and the N. C. Department of Mental Health whose services are available to alcoholics and their families)

Competent Help Is Available At The Local Level

ALAMANCE—

+ *Alamance County Council on Alcoholism,* Room 802, N. C. National Bank Bldg., Burlington 27215; Tel: 919-226-4403.

† *Alamance County Mental Health Clinic,* 221 Graham-Hopedale Rd., Burlington 27215, Tel: 919-227-6271.

ALLEGHANY (See Watauga)

ANSON—

† *Anson County Health Department,* Wadesboro 28170, Tel: 704-694-2516.

* *Education Division, Board of Alcohol Control,* 125 Wade St., P. O. Box 29, Wadesboro 28170, Tel: 704-694-2711.

AVERY (See Watauga)

BERTIE (Hertford, Martin)—

+ *Roanoke-Chowan Alcohol Information and Service Center,* 111 Belmont St., P. O. Box 143, Windsor 27983, Tel: 919-794-2895.

BUNCOMBE—

+ *Alcohol Information Center,* Parkway Offices, Asheville 28802, Tel: 704-252-8748.

† *Mental Health Center of Buncombe County,* 415 City Hall, Asheville 28801, Tel: 704-254-2311.

BURKE—

* *Burke County Council on Alcoholism,* 211 N. Sterling St., Morganton 28655; Tel: 704-443-1221.

CARTERET (See Craven)

CABARRUS—

† *Cabarrus County Mental Health Clinic,* 102 Church St., Concord 28025; Tel: 704-786-1181.

CATAWBA—

* *Catawba County Council on Alcoholism,* 420 Seventh Ave., S. W., Hickory 28601; Tel: 704-328-3564.

CLEVELAND—

† *Cleveland County Mental Health Clinic,* 101 Brookhill Rd., Shelby 28150; Tel: 704-482-3801.

CRAVEN (Carteret, Jones, Pamlico)—

‡ *Neuse Mental Health and Alcoholism Center* (Craven County Hospital, New Bern 28560; Tel: 919-638-5173, Ext. 294)

+ *Division on Alcoholism,* 411 Craven St., P. O. Box 1466, New Bern 28560; Tel: 919-637-5719.

+ *Division on Alcoholism,* 506 Broad St., P. O. Box 82, Beaufort 28516; Tel: 919-728-4033.

CUMBERLAND—

† *Cumberland County Mental Health Center:*

+ *Division on Alcoholism,* Cape Fear Valley Hospital, Fayetteville 28302; Tel: 919-484-8123.

DARE (See Pasquotank)

DURHAM—

† *Department of Psychiatry,* Duke University Medical Center, Durham 27706; Tel: 919-684-8111, Ext. 3416.

* *Durham Council on Alcoholism,* 602 Snow Bldg., Durham 27702; Tel: 919-682-5227.

EDGECOMBE (Nash)—

† *Edgecombe-Nash Mental Health Clinic*

+ *Division on Alcoholism,* 228 Hammond St., Rocky Mount 27801; Tel: 919-442-8021.

FORSYTH—

† *Department of Psychiatry, Bowman Gray School of Medicine,* N .C. Baptist Hospital, Winston-Salem 27103; Tel: 919-725-7261.

† *Forsyth County Department of Mental Health:*

+ *Alcoholism Program of Forsyth County,* 802 O'Hanlon Bldg., 105 W. 4th St., Winston-Salem 27101; Tel: 919-725-5359.

† *Forsyth County Mental Health Unit,* 1020 E. 7th St., Winston-Salem 27101; Tel: 919-722-0364.

GASTON—

† *Gaston County Mental Health Center:*

+ Center For Alcohol Related Problems, 302 S. York St.; Gastonia 28052; Tel: 704-864-9771.

GUILFORD—

* *Alcohol Education Center,* P. O. Box 348, Jamestown 27282; Tel: 919-454-2794.

Family Service Agency, 1301 N. Elm St., Greensboro 27401; Tel: 919-273-0523.

Family Service of High Point, 113 Gatewood Ave., High Point 27260; Tel: 919-883-1709 or 919-833-2119.

+ *Greensboro Council on Alcoholism,* 216 W. Market St., 206 Irvin Arcade, Greensboro 27401; Tel: 919-275-6471.

† *Guilford County Mental Health Center,* 300 E. Northwood St., Greensboro 27401; Tel: 919-273-8281.

† *Guilford County Mental Health Center,* 942 Montlieu Ave., High Point 27262; Tel: 919-888-9929.

HARNETT (See Lee)

HENDERSON—

* *Alcohol Information Center,* 2nd floor, City Hall, P. O. Box 472, Hendersonville 28739; Tel: 704-692-8118.

† *Henderson County Mental Health Clinic,* 820 Fleming St., Hendersonville 28739; Tel: 704-692-2138.

HERTFORD (See Bertie)

HOKE (See Moore)

JONES (See Craven)

LEE—

† Lee-Harnett Mental Health Clinic:

+ *Division on Alcoholism,* 106 W. Main St., P. O. Box 2428, Sanford 27330; Tel: 919-755-4129 or 919-755-4130.

MARTIN (See Bertie)

MECKLENBURG—

* *Charlotte Council on Alcoholism,* 1125 E. Morehead St., Charlotte 28204; Tel: 704-375-5521.

† *Mecklenburg County Mental Health Center,* 316 E. Morehead St., Charlotte 28202; Tel: 704-334-2834.

+ *The Randolph Clinic, Inc.,* 1804 East Fourth St., Charlotte 28204; Tel: 704-333-9026.

MONTGOMERY (See Moore)

MOORE—

* *Moore County Alcoholism Program,* P. O. Box 1098, Southern Pines 28387; Tel: 919-692-6631.

† *Sandhills Mental Health Center* (Hoke, Montgomery, Moore, Richmond):

+ *Alcoholism Services,* Medical Center Building, Pinehurst 28374; Tel: 919-295-6851.

NASH (See Edgecombe)

NEW HANOVER—

* *New Hanover County Council on Alcoholism,* 211 N. Second St., P O. Box 1435, Wilmington 28401; Tel: 919-763-7732.

† *Southeastern Mental Health Center,* 920 S. 17th St., Wilmington 28401; Tel: 919-763-7342.

ORANGE—

† *Alcoholism Clinic of the Psychiatric Out-Patient Service, N. C. Memorial Hospital,* Chapel Hill 27514; Tel: 919-942-4131, Ext. 336.

* *Orange County Council on Alcoholism,* Box 277, Carrboro 27510; Tel: 919-942-1089 or (if no answer) 919-942-1930.

PAMLICO (See Craven)

PASQUOTANK (Camden, Chowan, Dare, Perquimans)—

‡ *Mental Health and Alcoholism Authority:*

+ *Division on Alcoholism,* P. O. Box 645, Medical Bldg., Elizabeth City 27909; Tel: 919-335-1663.

PITT—

† *Coastal Plain Mental Health Center,* 1827 W. Sixth St., Greenville 27834; Tel: 919-752-7151.

+ *Pitt County Alcohol Information and Service Center,* 907 Forbes St., P. O. Box 2371, Greenville 27834; Tel: 919-758-4321.

RICHMOND (See Moore)

ROWAN—

* *Educational Division, Rowan County ABC Board,* P. O. Box 114, Salisbury 28144; Tel: 704-633-1641.

† *Rowan County Mental Health Clinic,* Community Bldg., Main and Council Sts., Salisbury 28144; Tel: 704-633-3616.

SCOTLAND—

† *Scotland County Mental Health Clinic,* 1304 Biggs St., Laurinburg 28352; Tel: 919-276-7360.

VANCE—

† *Vance County Mental Health Clinic,* County Home Rd., Henderson 27536; Tel: 919-492-1176 or 919-438-4813.

* *Vance County Program on Alcoholism,* 158 Bypass W., P. O. Box 1174, Henderson 27536; Tel: 919-438-3274 or 919-483-4702.

WAKE—

† *Mental Health Center of Wake County,* Wake Memorial Hospital, Raleigh 27610; Tel: 919-834-6484.

* *Wake County Health Department,* 3010 New Bern Ave., Raleigh 27610; Tel: 919-833-1655.

WATAUGA (Alleghany, Avery, Wilkes)—

† *New River Mental Health Center:*

+ *Division on Alcoholism,* 210 W. King St., Boone 28607; Tel: 704-264-8759.

+ *Division on Alcoholism,* 101-A W. Main St., Wilkesboro 28697; Tel: 919-838-3551.

WILSON—

Aftercare Clinic, Encas Rural Station, Wilson 27893; Hours: Mon.-Fri., 8:00 a.m.-5:00 p.m.; Tel: 919-237-2239.

* *Wilson County Council on Alcoholism,* Room 308, 116 S. Goldsboro St., Wilson 27893; Tel: 919-237-0585.

Wilson Mental Health Clinic, Encas Rural Station, Wilson 27893; Tel: 919-237-2239.

WILKES (See Watauga)

EDUCATION AND INFORMATION SERVICES

INVENTORY—quarterly magazine using the techniques of education in presenting facts about alcoholism in popular, illustrated style.

Films—on alcohol facts and personality health for distribution among groups interested in brief, factual motion picture studies. Obtainable from the Film Library, N. C. State Board of Health, Raleigh, N. C. Please request films as far in advance as possible and state second and third choices.

The ARC Brochure—illustrated booklet on North Carolina's program for treating alcoholism as an emotional sickness.

The New Cornerstones—Family manual giving basic facts about alcoholism and suggestions for coping with the personality sickness.

Library Books—Books on alcoholism are available from the North Carolina State Library through local libraries to residents of North Carolina. To obtain any of the books listed in the March-April, 1964 issue of **Inventory,** go to your community library and make the request.

Staff Speakers—members of the Raleigh and A.R.C. staffs are available for speeches before civic and professional groups.

Teacher's Guide—kit containing reference material and pamphlets on alcoholism and mental health. Available to teachers from the Education Division, N. C. Department of Mental Health, Raleigh.

Consultant Service—for establishment of local programs.

These services are free upon request of citizens residing in North Carolina. For free materials in limited quantity, write

Education Division, N. C. Department of Mental Health
P. O. Box 9494
Raleigh, N. C. 27603

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